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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
1992 Annual Access Tariff Filings	)	CC Docket 92-141

COMMENTS OF BELL ATLANTIC[1]
ON U S WEST'S PETITION FOR PARTIAL RECONSIDERATION

As Bell Atlantic explained in its Comments on Ameritech's Application for Partial Review,[2] the Bureau's order[3] imposing a single inflexible method of allocating sharing among price cap baskets flies in the face of the Commission's price cap orders, which seek to preserve carrier flexibility. Therefore, Bell Atlantic supports U S WEST's petition for reconsideration of the Bureau Order.[4]

The Bureau should reconsider its order and allow carriers to allocate sharing according to any reasonable cost

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[1] The Bell Atlantic telephone companies ("Bell Atlantic") are The Bell Telephone Company of Pennsylvania, the four Chesapeake and Potomac telephone companies, The Diamond State Telephone Company, and New Jersey Bell Telephone Company.

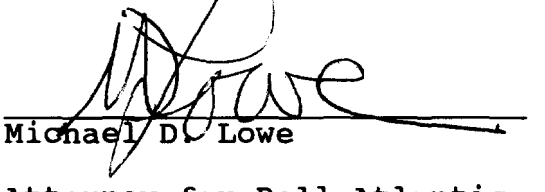
[2] Comments of Bell Atlantic on Ameritech's Application for Partial Review, *1992 Annual Access Tariff Filings*, CC Docket No. 92-141 (filed July 8, 1992) (copy enclosed).

[3] *1992 Annual Access Tariff Filings*, CC Docket No. 92-141, Memorandum Opinion and Order Suspending Rates and Designating Issues For Investigation, at ¶¶ 3-8 (June 22, 1992) ("Bureau Order").

[4] U S WEST Communications, Inc. Petition for Partial Reconsideration, *1992 Annual Access Tariff Filings*, CC Docket No. 92-141 (filed July 22, 1992).

causative method, such as those proposed by Bell Atlantic, Ameritech, and U S WEST.

Respectfully submitted,



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August 6, 1992

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing "Comments of Bell Atlantic on US West's Petition for Partial Reconsideration" was served this 6th day of August, 1992, by delivery thereof by first class mail, postage prepaid, to the parties on the attached list.

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COMMENTS OF BELL ATLANTIC[1]
ON AMERITECH'S APPLICATION FOR PARTIAL REVIEW

The Bureau's order[2] imposing a single inflexible method of allocating sharing among price cap baskets flies in the face of the Commission's price cap orders, which seek to preserve carrier flexibility. Therefore, Bell Atlantic supports Ameritech's application for review of the Bureau Order.[3]

The Bureau Order also deprives Bell Atlantic's end user customers of $18 million in rate reductions. Instead, it requires Bell Atlantic to give AT&T a windfall of more than $11 million -- a windfall that AT&T has already indicated it intends to keep, not pass on to consumers. This will add to the *nearly $2 billion* in post-divestiture access charge reductions

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[1] The Bell Atlantic telephone companies ("Bell Atlantic") are The Bell Telephone Company of Pennsylvania, the four Chesapeake and Potomac telephone companies, The Diamond State Telephone Company, and New Jersey Bell Telephone Company.

[2] *1992 Annual Access Tariff Filings*, CC Docket No. 92-141, Memorandum Opinion and Order Suspending Rates and Designating Issues For Investigation, at ¶¶ 3-8 (June 22, 1992) ("Bureau Order").

[3] *Ameritech Operating Companies' Application for Partial Review*, CC Docket No. 92-141 (filed June 23, 1992).

that AT&T has already kept, instead of using them to lower end user prices.

Bell Atlantic has undertaken major efforts in the last few years, including stringent reductions in costs and workforce to improve its efficiency and productivity. The results are reflected in its 1992 sharing. But instead of allowing Bell Atlantic to use sharing to reduce prices for its own end users, the Bureau is requiring Bell Atlantic to give the benefit primarily to AT&T, which has made a corporate decision not to reduce its end user prices. This is a perverse result: Bell Atlantic's employees go the extra mile to cut costs, but are forbidden to pass the cost reductions on to their end user customers; instead *AT&T's shareholders* capture the benefit.

I. The Bureau Order Conflicts With Commission Policy.

The Bureau Order conflicts with the Commission's decision to preserve carrier flexibility in the selection of cost-causative sharing allocation methods. In the Price Cap Reconsideration Order, the Commission rejected a proposal that the method of allocating sharing be specified in advance:

> Our rules require that sharing adjustments, like all exogenous adjustments, be flowed through on a cost-causative basis. ... [W]e have no reason to believe this language is inadequate. We therefore find no

present need to specify a particular method of reflecting "cost causation."[4]

The Bureau itself acknowledged the Commission's policy that carriers might well use different sharing allocation methods, when it required the carriers' 1992 access tariff filings to identify "the method used to allocate the sharing amounts among the baskets."[5]

The Commission's policy is a sensible one, and the Bureau should be required to follow it. By allowing flexibility in the selection of an allocation methodology, the Commission advances the limited pricing flexibility that is the central innovation of the price cap regime.[6] This flexibility is increasingly important in the LEC services that face the most

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[4] *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, Order on Reconsideration, 6 FCC Rcd 2637, ¶ 113 (1991) ("Price Cap Reconsideration Order").

[5] *Commission Requirements for Cost Support Material To Be Filed with 1992 Annual Access Tariffs*, DA 92-174, Order at ¶ 20 (released Feb. 10, 1992) (permitting carriers to choose "the method used").

The Bureau also acknowledged the Commission's policy of flexibility in its 1991 access tariff decision, where it declined to prohibit LEC use of alternate allocation methods for other exogenous cost changes besides sharing. "We note that the Commission directed the LECs to allocate exogenous cost changes on a cost-causative basis. While the Commission did not mandate the use of Part 69 for the allocation of exogenous cost changes, it certainly did not prohibit the use of Part 69 for this purpose." *Annual 1991 Access Tariff Filings*, Memorandum Opinion and Order, 6 FCC Rcd 3792, at ¶ 37 (1991).

[6] *See, e.g.*, Price Cap Reconsideration Order at ¶¶ 13, 92; *Policy and Rules Concerning Rates for Dominant Carriers*, CC Docket No. 87-313, Second Report and Order, 5 FCC Rcd 6786, ¶ 35 (1990) ("Price Cap Order").

vigorous competition, interexchange and special access services. Allowing LECs to select among cost-causative allocation methods encourages them to distribute sharing in response to customer needs and market conditions.

The method by which Bell Atlantic (and Ameritech) proposed to share satisfies the cost-causative test. Bell Atlantic allocated its overall sharing obligation among baskets based on whether and how much earnings from those baskets exceeded the 12.25% sharing threshold. These are the baskets that "caused" the sharing; therefore, these are the baskets that ought to share.

The Bureau rejected this approach and instead dictated a single sharing method: sharing must be allocated among baskets based on revenues regardless of the earnings in each basket. The Bureau rejected Ameritech's and Bell Atlantic's approach because the Commission had already rejected a basket-by-basket sharing calculation.[7] This is a straw man. Bell Atlantic does not propose to calculate its sharing obligation on an individual basket basis -- the Commission is correct that this would lead to the anomaly of a sharing obligation by a carrier that is earning below 12.25% overall. But once sharing is determined on a total interstate basis, the question remains how that sharing is to be allocated among baskets. Allocation on the basis of basket

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[7] Bureau Order at ¶¶ 6-7.

earnings above the sharing threshold should be among the options available to the LECs.

II. The Bureau Order Requires Bell Atlantic To Share Mainly With AT&T's Shareholders.

Bell Atlantic's 1992 results illustrate why the Commission's policy of flexibility is in the public interest and should be enforced. Because the baskets that earned above the sharing threshold, interexchange and special access, consist mainly of end user services, most of Bell Atlantic's 1992 sharing would have lowered prices for end users.[8]

The Bureau Order prohibits this pro-consumer result by requiring Bell Atlantic to share most of its productivity bonus, not with the end users whose services earned it, but instead with AT&T. By insisting on a single inflexible allocation method, the Bureau has required Bell Atlantic to reallocate $18 million of sharing from interexchange and special access to the traffic sensitive and common line baskets -- that is, to the interex-

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[8] The entire $16.8 million of sharing Bell Atlantic allocated to the interexchange basket would have flowed through directly to lower end user prices. Much of the $5.4 million allocated to special access would also directly benefit end users, because interexchange carriers typically resell special access to large end user customers at cost plus a mark-up. In addition, Bell Atlantic itself sells special access services directly to end users.

change carriers. Approximately 63%, or $11.3 million, of this will go to AT&T.[9]

AT&T, however, has made it clear that it intends to keep the 1992 access charge reductions for itself. In its recent price cap filing -- before the Bureau Order -- AT&T admitted that it was already the beneficiary of $190.8 million in 1992 LEC access charge reductions, but proposed *not a dollar* of reductions in its own customer prices.[10] Although it reduced its Price Cap Indices to account for this savings, it proposed no change at all in its Actual Price Indices, or the customer prices on which they are based.[11] The Bureau Order will only increase AT&T's 1992 access charge windfall.

AT&T's behavior fits a longstanding pattern. Since divestiture, the LECs have reduced their access charges to AT&T by $10.1 *billion*, but AT&T has passed only $8.2 billion on to its

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[9] Industry Analysis Div., FCC, *Long Distance Market Shares: First Quarter 1992*, at 8 (June 1992).

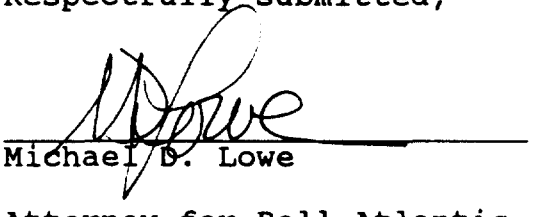
[10] AT&T 1992 Annual Price Cap Filing, at Attachment pp. 4-5, 9 (filed May 15, 1992). The access charge reductions included in this filing were partially offset by exogenous cost increases of $109.8 million.

[11] *Id.* at Attachment p.8 and Exh. 4.

customers in price reductions.[12] It has kept the remaining $1.9 billion. The Commission should give careful scrutiny to any Bureau policy, like the policy reflected in the Bureau Order, that forbids the LECs from attempting to counter this pattern. The LECs should be allowed to choose a cost-causative allocation method that awards more sharing to the end user services that earned it, and less to AT&T's shareholders.

Accordingly, the Commission should review and reverse the allocation decision in the Bureau Order, as requested in Ameritech's petition.

Respectfully submitted,



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[12] William E. Taylor, *Effects of Competitive Entry in the U.S. Interstate Toll Markets: An Update*, at 1 and Exh. 1, p.2 (Nat'l Economic Research Assoc., May 28, 1992) (attached). In addition, AT&T kept another $700 million in net exogenous cost reductions without reducing its consumer prices. *Id.* at Exh. 1, p.2.

The original version of this study, which showed similar results through mid-1991, was filed with the Bureau in August 1991. Comments of Bell Atlantic, CC Docket No. 91-141 (filed Aug. 6, 1991). AT&T has made no attempt to refute it.

EFFECTS OF COMPETITIVE ENTRY IN THE U.S. INTERSTATE TOLL MARKETS: AN UPDATE

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May 28, 1992

EFFECTS OF COMPETITIVE ENTRY IN THE U.S. INTERSTATE TOLL MARKETS

A. Prologue and Summary

This study was originally performed in August 1991, and was filed with the Federal Communications Commission in CC Docket No. 91-141. It addressed the extent to which competitive pressures in the interstate toll market led to lower toll rates and an expansion of toll demand. It found that reductions in carrier access charges more than accounted for reductions in AT&T's toll prices, and that the reduction in toll prices more than accounted for the growth in interstate toll demand.

We have updated the study using data through 1992. The results are unchanged:

- Regulated competition in the interstate toll market has not led to price competition. While annual carrier access charges paid by AT&T have fallen by $10,131 million from 1984 through 1992, AT&T annual prices have fallen by only $8,223 million.

- When you account for the changes in access charges billed to AT&T, toll prices actually declined faster before divestiture than after. Even if AT&T's prices had remained constant (net of access charges), the rate of decline of real toll prices (net of access charges) would have been about half the rate at which they declined (net of separations changes) in the decade prior to divestiture.

- Regulated competition in the interstate toll market has not led to an expansion of demand. Toll demand grew no more than would be expected, based on price, income, and population changes.

While the FCC's policies for interstate toll services have resulted in enormous welfare gains for U.S. consumers, competition--or rather the type of regulated competition actually observed for interstate toll services--is not responsible for these benefits. In general, the FCC's rebalancing efforts led to dramatic reductions in interstate carrier access charges which, in turn, led to lower toll rates and increased toll demand. But the substantial price reductions that might have been expected to arise from toll competition have yet to materialize.

B. Introduction

In its Notice of Proposed Rulemaking and Notice of Inquiry in CC Docket No. 91-141, (released May 6, 1991) , the Commission suggested that historical evidence supports the view that entry and regulated competition have brought benefits to consumers of U.S. interstate long distance services.[1] In particular,

> "...competition in the provision of interstate long-distance service has led to sharply reduced rates, a larger variety of service options, and more rapid deployment of new technologies..." (¶11).

Indeed, since divestiture and equal access transformed interstate long-distance services, prices have fallen and demand has grown at unprecedented rates. While it is tempting to ascribe these changes to the pressures of competition, careful analysis shows that the Commission's policy of rebalancing local and toll rates is directly and entirely responsible for the overall reduction in long distance rates. There is no evidence that entry and competition--as experienced to date for U.S. long-distance services--have had any effect in reducing prices or expanding output in the interstate long distance market.

C. Price Changes

Long-distance prices fell faster (in real terms) since divestiture than their long-run historical average: from 1984 to 1991, real interstate toll rate reductions averaged about 8.18 percent annually.[2] From 1972-1983, the longest pre-divestiture period over which interstate rate data are compiled by the Bureau of Labor Statistics, interstate toll rates declined at an annual average (real) rate of 2.7 percent. Since the post-divestiture period coincides with the period for which equal access was available and during

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[1] Expanded Interconnection with Local Telephone Company Facilities, CC Docket No. 91-141, Notice of Proposed Rulemaking and Notice of Inquiry (released May 6, 1991) ("NPRM" or "NOI").

[2] Using the Bureau of Labor Statistics producer price index for interstate toll rates, deflated by the BLS GNP-PI.

which AT&T lost some of its substantial market share,[3] it is tempting to attribute these additional price reductions to direct competition among interexchange carriers. But that would be wrong.

From 1984 to 1990, the FCC undertook a fundamental rebalancing of local access and toll rates in the United States, primarily through two related activities. First, the FCC instituted subscriber line charges (end user common line charges) by which interstate non-traffic sensitive costs were recovered directly from end users on a flat rate basis rather than from toll usage charges. Beginning in 1984, subscriber line charge revenues grew from approximately $1.296 billion to $6.069 billion in 1990-91, and all of that revenue represented lower carrier access charges paid by the interexchange carriers.[4] Second, the FCC instituted a number of separations changes which effectively reduced interstate costs while increasing intrastate costs. The net effect of separations changes (and other regulatory changes, including changes in income tax rates) was to reduce carrier access charges an additional $4.493 billion (annually) by 1990.[5] By 1990, carrier access charge expenditures were approximately $9.266 billion less per year because of these changes in federal regulatory policy.

Thus access charges, which constitute a large fraction of the marginal cost of interexchange carriers, fell significantly over the post-divestiture period due to the implementation of subscriber line charges and changes in separations policy. Indeed, AT&T lowered its interstate toll rates over this period, reflecting this reduction in its marginal cost. However, AT&T's total price reduction over this period was substantially less than the amount by which its access charges were reduced. See Exhibit 1.

This finding is important in interpreting the U.S. experience with competition for interstate toll services. It suggests that beyond the mandatory reflection of access charge reductions in AT&T's rates, which were then followed by the other IXCs, interexchange carriers initiated no significant price

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[3]The FCC calculates that AT&T's market share of switched access minutes of use fell from 84.2 percent in the third quarter of 1984 to 62.8 percent in the fourth quarter of 1991: see Federal Communications Commission, "Long Distance Market Shares: Fourth Quarter, 1991," Analysis Division, Common Carrier Bureau, March 24, 1992, Table 3. The FCC calculations show that AT&T's market share loss stopped its decline in the second quarter of 1990 and has risen slightly since then.

[4]United States Telephone Association, ex parte presentation to the FCC, CC Docket 87-313, filed August 6, 1990, Table 2

[5]Ibid, Table 5.

competition for toll services.[6] Indeed, the current situation could better be described as a regulated price umbrella: MCI and Sprint generally followed AT&T price reductions but the gap in prices shrunk from 10-20 percent in mid-1984 to about 5 percent in 1987 when the unequal access discount was essentially eliminated.[7]

This lack of price reductions among the IXCs is surprising because we observe comparatively large reductions in real interstate toll rates (adjusted for changes in access charges) during the period before divestiture and equal access.[8] If we adjust interstate toll rates to account for the changes in the non-traffic sensitive cost assignment in the Ozark Plan between 1972 and 1984, we observe that real interstate toll rates, net of changes in separations, fell at an annual rate of 6.28 percent.[9] See Exhibit 2. Since divestiture (1984-1991), inflation averaged approximately 3.70 percent per year. If we (conservatively) treat AT&T nominal interstate toll prices as constant (net of access charge changes), real interstate toll rates, net of changes in access charges, fell at an annual rate of less than 3.70 percent. Net of access charge changes, then, real interstate toll rates fell roughly twice as fast in the decade before divestiture than in the seven years after. This finding is hardly consistent with the view that competition among interexchange carriers led to drastically lower prices. Rather, it suggests that the type of competitive entry experienced for U.S. interstate toll services since divestiture may not encourage price rivalry for ordinary interstate toll calling.[10]

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[6]This generalization applies to aggregate interstate toll service. There is evidence of competitive pressure reducing toll rates (i) paid by large business customers (e.g., through new services such as Megacom, Prism, and Ultra-WATS), and (ii) in the intrastate toll markets where long-haul rates fell and short-haul rates rose from 1983 to 1987 (see A. Mathios and R. Rogers, "The Impact of Alternative Forms of State Regulation of AT&T on Direct-Dial Long-Distance Telephone Rates," The Rand Journal of Economics, Autumn 1989, p. 446.

[7]See Michael E. Porter, "Competition in the Long Distance Telecommunications Market: An Industry Structure Analysis," filed with AT&T's Comments in CC Docket 87-313, October 19, 1987.

[8]Competition in interstate switched services technically began in 1974 with the entry of MCI's Execunet Service.

[9]1972 is the earliest year for which BLS price data for interstate toll service is available.

[10]Competitive entry for U.S. interstate toll services differed in several important ways from unfettered free competition. The seven regional (former) Bell holding companies are barred from the market, and GTE is subject to a decree which regulates its participation. In addition, the FCC instituted (i) access charge discounts for entrants to compensate for unequal access, (ii) non-cost-based access transport pricing which favored the smaller entrants to compensate for AT&T's locational advantage, and (iii) asymmetric regulation of AT&T which continues to this day.

D. Demand Growth

A second possible consequence of competition for interstate toll services was growth in demand. While changes in the units of measurement make it difficult to compare pre- and post-divestiture interstate toll growth rates, the evidence suggests that toll demand grew more rapidly in the post-divestiture period. Between 1962 and 1982, annual growth in interstate minutes of use averaged 10.5 percent.[11] From 1984 to 1991, interstate switched access minutes of use grew at an annual rate of 11.81 percent,[12] and this measure of demand probably understates demand growth, as it ignores demand served by bypass services, including WATS and MEGACOM-type services. Competition is sometimes alleged to have caused this increase in demand through reducing prices and also through increasing marketing activities (such as advertising) and the introduction of new services. Indeed, in its Notice of Proposed Rulemaking in CC Docket 91-141, the Commission cites overall traffic growth as a reason why a loss of market share to competitors need not result in higher prices for remaining customers.[13]

While interstate toll demand did grow at an unprecedented rate after competitive entry, the growth was not due to additional new services, advertising, consumer awareness, etc. The change in the growth rate is completely explained by changes in price, income and population. In Exhibit 3, we predict toll demand based on observed price, income and population and subtract the predicted value from the actual observed value. The rate of growth of this unexplained component of demand measures the rate at which the demand curve shifted outward, due to such non-price factors as marketing and advertising efforts. From the data, we observe that unexplained demand grew approximately 1.91 percentage points more slowly after divestiture: that is, changes in price, income and population more than explain the increase in the rate of growth of interstate toll demand after divestiture.[14]

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[11] AT&T, "Long Lines Statistics, 1960-1982."

[12] Federal Communications Commission, "Trends in Telephone Service," February, 1992, Table 24.

[13] NPRM, paragraph 66.

[14] If one believes competition began in the 1970s, this comparison of pre and post-divestiture growth rates may seem inappropriate. Nonetheless, if the same comparison is done before and after 1978, the same result appears: unexplained demand grew approximately 1.82 percentage points more slowly in the 1979-91 post-competitive period than in the 1972-1978 period. See Exhibit 3, Table 2A.

One explanation for this slowdown in the rate of growth of toll demand is bypass: toll demand may have expanded due to competition but the proportion of toll demand measured by switched access minutes of use may have fallen. To examine this possible explanation, we took the LEC estimates of traffic lost to bypass filed with the FCC as part of its Monitoring Report and added them to the switched access demand measurements. Using the sum of bypass and switched access minutes to measure toll growth from 1984 to 1991, we still observe slower growth of unexplained demand in both the post-competition period and the post-divestiture period. See Exhibit 3.

The same point was made in the recent price cap proceeding (CC Docket 87-313), where the Commission staff requested estimates of the demand stimulation for interstate toll service stemming from the implementation of subscriber line charges and other exogenous cost changes in LEC access charge filings. As shown in Exhibit 4, the measure of demand stimulation deemed "reasonable" by the Commission in its Order,[15] accounts fully for the demand stimulation actually observed over the period.

E. Conclusions

Consumers have benefitted enormously from lower interstate toll prices and expanded interstate toll demand. However, competition in the interstate toll market is not responsible for either of those benefits. Reductions in the carrier access charges paid by AT&T outweigh AT&T's toll price reductions, and the increase in toll demand is more than explained by changes in toll prices, income and population.

[15] Second Report and Order, CC Docket 87-313, released October 4, 1990, Appendix C, paragraph 30.

THE REDUCTION IN AT&T'S ACCESS CHARGES EXCEEDS THE REDUCTION IN ITS TOLL PRICES

In Table 1, we list each date on which a substantial access charge change or AT&T price change occurred, the dollar amount of the access cost reduction experienced by AT&T,[16] and the dollar amount of revenue change forecasted by AT&T as a result of its price change. All data through 9/17/88 were taken from FCC and AT&T filings in the price cap docket.[17] The 7/1/89 and 7/1/90 data were taken from the FCC's report on AT&T's performance under price caps.[18] The 1/1/90 and 1/1/91 data are taken from AT&T filings, as reported by Victor Glass of the National Exchange Carrier Association. The remaining access charge and price changes are taken from AT&T price cap filings.[19]

It is unlikely that every AT&T price change or access charge change since AT&T went under price caps on July 1, 1989 is accounted for in Table 1. However, we can check our work by calculating the total AT&T price reduction directly from AT&T's actual price index (API) reported in their latest (May 15, 1992) price cap filing. Table 1A gives the total percentage and dollar annual rate reductions implemented by AT&T since January 1989, July 1989, and July 1990. Evaluated at 1992 demand levels, AT&T price reductions since January 1989 totalled $1,193.0 million per year; our calculation in Table 1, where each price reduction is evaluated at current demand, shows a total annual rate reduction over the period of $1,239 million. The small difference in these estimates is due to (i) additional AT&T price changes other than those listed in Table 1 and (ii) the different revenue bases used to evaluate the changes in price. Table 1 shows that during that period, AT&T experienced annual access charge reductions totalling approximately $2,118 million, evaluated at the concurrent level of demand.

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[16]At forecasted demand levels that include stimulation from anticipated AT&T rate reductions.

[17]FCC, Appendix C, 2nd Further Notice, CC Docket 87-313, 4/17/89, and AT&T, "Retrospective Analysis of AT&T's Productivity Growth, 1984-88," AT&T Comments on Further Notice of Proposed Rulemaking, CC Docket 87-313, Appendix D, 7/26/88.

[18]FCC, Common Carrier Bureau, "AT&T's Performance Under Price Cap Regulation," Report to the Subcommittee on Telecommunications and Finance, Committee on Energy and Commerce, U.S. House of Representatives, October, 1990, Chart II-B.

[19]The 7/1/91 cost and rate change data were taken from AT&T's May 17, 1991 Annual Access Charge Filing and Transmittal No. 3242, filed June 29, 1991. The 12/19/91 data was taken from AT&T Transmittal No. 3734, filed 12/19/91. The 7/1/92 data comes from AT&T's 1992 Annual Price Cap filing dated 5/15/92.

Table 1
Changes in Carrier Access Charges and
Changes in AT&T Interstate Toll Rates
($ Million)

Date	Access Charge Change	Other Exogenous Cost Changes	Cumulative Cost Changes	AT&T Price Changes	Cumulative AT&T Price Changes
1/1/84	$0	$0	$0	$0	$0
5/25/84	($1,400)		($1,400)	($1,400)	($1,400)
1/15/85	$274		($1,126)		($1,400)
4/26/85			($1,126)	$303	($1,097)
6/1/85	($1,157)		($2,283)	($1,157)	($2,254)
10/1/85	($525)		($2,808)		($2,254)
1/1/86			($2,808)	($135)	($2,389)
1/11/86	$25		($2,783)	$248	($2,141)
2/28/86			($2,783)	$18	($2,123)
4/15/86			($2,783)	$72	($2,051)
6/1/86	($2,000)		($4,783)	($2,000)	($4,051)
1/1/87	($1,865)		($6,648)	($1,865)	($5,916)
3/13/87			($6,648)	$18	($5,898)
7/1/87	($593)		($7,241)	($593)	($6,491)
12/1/87			($7,241)	$77	($6,414)
1/1/88	($772)	($524)	($8,537)	($772)	($7,186)
6/17/88			($8,537)	$28	($7,158)
9/17/88			($8,537)	$174	($6,984)
7/1/89	($776)		($9,313)	($785)	($7,769)
1/1/90	($385)	($141)	($9,839)	($267)	($8,036)
7/1/90	($482)	($143)	($10,464)	($192)	($8,228)
1/1/91	$0	($1)	($10,595)	($84)	($8,312)
7/1/91	($251)	($9)	($10,855)	$18	($8,294)
12/19/91	$97	($25)	($10,783)	$71	($8,223)
7/1/92	($191)	$110	($10,864)	$0	($8,223)
TOTAL	($10,131)	($733)	($10,864)	($8,223)	($8,223)

Table 1A
AT&T Price Changes Under Price Caps

	1992 API	7/1/90 API	7/1/89 API	1/1/89 API
BASKET 1	0.943	0.943	0.984	1.000
BASKET 2	0.939	0.928	0.973	1.000
BASKET 3	0.979	0.931	0.970	1.000
	1992 BASE REVENUE	**7/1/90**	**7/1/89**	**1/1/89**
BASKET 1	$17,762	$0	($746)	($1,012)
BASKET 2	$2,935	$35	($102)	($179)
BASKET 3	$96	$5	$1	($2)
TOTAL	$20,793	$40	($847)	($1,193)
PERCENT	100.00%	0.19%	-4.07%	-5.74%
SOURCE:	FCC: 10/90 PRICE CAPS REPORT AT&T: 5/15/92 PRICE CAPS FILING			

REAL INTERSTATE TOLL RATES (NET OF ACCESS CHARGES) FELL FASTER BEFORE DIVESTITURE THAN AFTER

Absent changes in access charges, Exhibit 1 shows that interstate toll rates would have risen in nominal terms from 1984 to 1991. In real terms, then, interstate toll rates would have fallen at less than 3.70 percent per year (net of access charge changes), since the GNP-PI for all commodities grew at an annual rate of 3.70 percent from 1984 to 1991.

This rate of decline of real toll rates (net of access charges) is low compared with the 1970s. According to the Bureau of Labor Statistics producer price index, real interstate toll rates fell at about 2.6 percent annually from 1972 to 1983, which was a period in which interstate costs were increasing due to changes in separations generated by the Ozark formula. If we held the interstate NTS allocation fixed at its 1972 level, real interstate revenues would have grown 3.68 percentage points more slowly (per year) from 1972 to 1983.[20] Thus, adjusting for the change in the interstate NTS allocation, we find that real interstate toll rates would have fallen at an annual rate of 6.28 percent (6.28 = 2.6 + 3.68) from 1972 to 1983. Since divestiture, real interstate toll rates (net of access charge changes) have declined at less than an annual rate of 3.70 percent -- about half the annual rate at which they declined in the decade prior to divestiture.

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[20]Between 1972 and 1982, the subsidy from interstate toll for the Bell System (in the form of non-traffic sensitive cost allocations) increased from $1.570 billion to $7.690 billion. (C.L. Weinhaus and A.G. Oettinger, Behind the Telephone Debates, Norwood, New Jersey: Ablex Publishing Corporation, 1988, p. 81.) At the same time, Bell System interstate revenues increased from $6.493 billion to $21.8 billion. (FCC, Form M (Monthly Report No. 1), various years) If the interstate NTS allocation had been held constant between 1972 and 1982, interstate revenues would have increased from $6.493 billion to $15.68 billion (where 15.68 = 21.8 - 7.690 + 1.570). Annual growth in interstate revenues thus was 12.88 percent, and annual growth in interstate revenue net of NTS allocation changes was 9.22 percent. The difference in the annual growth rate of revenue accounted for by the change in NTS cost allocation was thus 3.68 percentage points.

GROWTH IN DEMAND DUE TO COMPETITION

We compare the decade before divestiture (1972-1982) with the period after divestiture (1984-1988).[21] In each period, we divide actual demand growth into two parts:

1. predicted growth: a part due to changes in prices, income, and population and
2. unexplained growth: a (residually-measured) part due to other changes--changes in taste, changes in the market place (such as competitive entry) etc.

If competition shifts the demand curve outward due to advertising, the availability of new products or services, or a heightened awareness of the possibility of telephone service, we would expect to see that shift as an increase in unexplained growth.

Using conventional measures of the responsiveness of demand to changes in price, income, and population, we calculate the rate of growth of unexplained demand. In the 1972-82 period, demand was predicted to grow at an annual rate of 4.04 percent. Actual demand growth averaged 8.92 percent, leaving a growth rate of unexplained demand of 4.88 percent. In the 1984-91 period, demand growth was predicted to average 8.83 percent and actual demand growth averaged 11.81 percent. Thus the growth rate of unexplained demand in the 1984-91 period averaged 2.97 percent. Growth in demand unexplained by changes in price, income, and population averaged 1.91 percentage points lower in the 1984-91 period compared with the 1972-82 period. See Table 2. Table 2A provides the same analysis, comparing the pre-ENFIA period with the post-ENFIA period (1972-78 with 1979-91) and obtains the same qualitative result.

One explanation of this reduction in the growth rate of unexplained demand after divestiture is the growth of bypass. Interstate toll demand is measured as interstate switched access demand after divestiture, and the growth of bypass demand--including MEGACOM and WATS-type services--would mask

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[21] Again, we treat the post-divestiture period as the competitive period, although the same analysis as that described below yields the same qualitative results if applied to the 1972-78, 1979-1990 periods. To judge the effects of competition on demand growth, it is useful to note that MCI and Sprint advertising was less than $5 million in 1980 compared with $45 million for AT&T (measured in 1986 dollars). Between 1983 and 1984, total annual advertising for AT&T, MCI and Sprint increased from about $100 million to about $150 million (in 1986 dollars). See Michael Porter, op. cit., Figure 23.

growth in toll demand after divestiture. To adjust our results for the possibility of bypass, we estimate interstate bypass usage from 1984 through 1991 and add that usage to our measure of switched access demand. Calculation of the bypass adjustment is outlined below. The results are shown in Table 2, where it is evident that adjusting for bypass growth does not reverse our earlier finding: growth in interstate toll demand (adjusted for bypass) unexplained by economic factors averaged 0.81 percentage points lower in the 1984-91 period than in the 1972-82 period.